

S-E-C-R-E-T

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AGENDA

Meeting No. 42

Research, Development and Production Review Board *11-11-55 A-1, 42*

2 March 1955

Room 2053 "I" Bldg. - 1400 Hours

I. Old Business:

1. Review and Approval of Minutes of Meeting #41.
2. Report by Engineering Division of Significant Changes in Projects' Status.
3. Proposal by the Engineering Division in regard to a 500-Watt Transmitter.
4. Report on Preparation of Letter to Chief, FI, regarding Priorities on Automatic Keying Device.
5. Discussion by Operations and Training Division of Agency Requirements for the AN/PRR-5 Receiver.

II. New Business:

1. Discussion by Operations and Training Division regarding Engineering Development of a Mechanical Filter Switch Kit for the SP-600 Receiver.
2. Report by Engineering Division on the Use of Standard Telephone Dials for the Keying of RS-1, 5, and 6 Transmitters.
3. Discussion of Items of Development Brought Up at R&D Ideas and Requirements Panel.

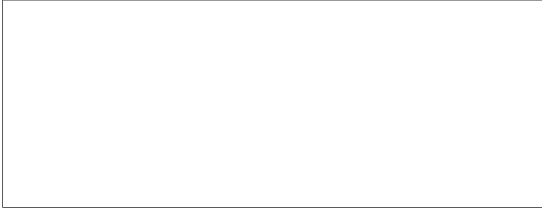
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25 YEAR RE-REVIEW

S-E-C-R-E-T
Research, Development and Production Review Board
Ideas and Requirements Panel

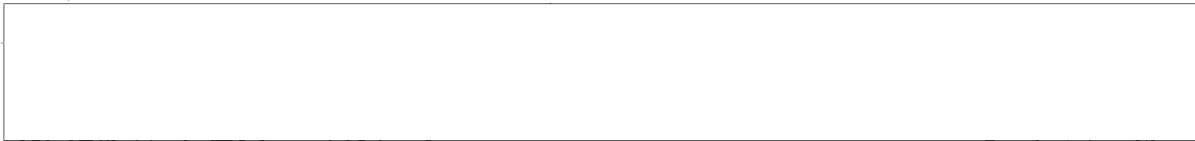
1. Meeting #2 was held in the OC Conference Room at 1400 hours on 16 February. The following persons were in attendance:



25X1

II. The following items were discussed:

1. OC-O&T stated that they felt there might be an operational use for the RS-9 unit employing telephone dial as a keyer. It is their thought that a transistorized tone oscillator could be built and the VHF carrier could be modulated with MCW. OC-E agreed to investigate the feasibility of this proposal.



OC-O&T that FM be utilized in order to reduce the size of the modulator needed for AM modulation. After some discussion the Panel felt that at the present time there did not seem to be sufficient advantage to utilize this type of system. It was tabled for further study by OC-O&T.



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4. [redacted] discussed the feasibility of utilizing noise type signals on the air for the [redacted]. Considerable discussion took place on this item, and it was agreed that there was some merit in this type of a system and that further discussions would be held.

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5. The OC-S representative queried whether the Laboratory could provide some support to them in the way of developing a form for molding pads. It was OC-E's opinion that the Laboratory could handle this, and if OC-S would request same together with technical information regarding it, the Laboratory could undertake this project.

III. The meeting adjourned at 1645 hours. The next meeting of the Panel will be held at 1400 hours on 16 March 1955.

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Secretary

Distribution:

RD&PRB Members and
Those in Attendance
R&D Lab
R&D External Projects

25X1

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MINUTES

Research, Development and Production Review Board

- I. Meeting #42 of the Research, Development and Production Review Board was held in the OC Conference Room at 1400 hours on 2 March 1955. The following persons were in attendance:

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II. Under Agenda Item I, Old Business:

1. The minutes of Meeting #41 were approved.
2. Report of Significant Changes in Projects' Status.

25X1
OC-O&T
ACTION

[] Present field tests have been completed as of 28 February. Transmissions were made from 7 locations. Quality of received messages was excellent throughout the tests. Evaluation of the complete test data will not be completed for approximately a month; however, only minor difficulties and breakdowns were experienced and the equipment itself and the tests are considered to be highly successful.

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Members of the Strategic Air Command have requested that this Agency consider joint participation in tests to be conducted from [] "as soon as possible". They have also requested that members of this Agency get together with them in a joint meeting to be held within the next month to discuss future plans for the [] program and the results of the tests. SAC was advised of the previous security agreements and was also told that there was a good possibility of the signals being picked up in Soviet areas from those locations.

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CC-S
and
SPD
ACTION

There was considerable discussion by the Board members as to the practicability of conducting these tests at the present time. It was generally felt that nothing new could be learned about propagation under [] conditions, although it was agreed that actual tests might be beneficial. It was felt that there was sufficient danger of signals radiating to Soviet controlled areas that checks should be made to determine this fact. An Ad Hoc committee comprised of representatives of the O&T, SPD and Security Division was appointed to investigate all aspects of these proposed tests in order that the Director might be properly advised.

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CC-O&T
ACTION

Quadricode: The Quadricode tests are proposed to start during the week of 7 March if the equipment is completed; an alternate test period would begin on 14 March. R&D representative will be stationed at the base at the [] plant while the field party consisting of []

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The question was raised by the O&T Division as to the wisdom of using the same frequencies in the Quadricode tests as were used during the recent [] tests. The Engineering Division reported that difficulty had been experienced in obtaining frequencies and that these were selected as a last resort. The Engineering Division requested that a mechanism be established whereby we could more readily obtain frequencies which could be used for tests such as these. The O&T Division was charged with the investigation of possibility of obtaining frequencies for Agency use. The Ad Hoc committee for the [] investigation was also charged with investigating general aspects of Quadricode tests as well, particularly the operation of Quadricode on the same frequencies as those of []

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CC-E
ACTION

RS-6A Modifications: A report has been received from [] 25X1
that the modifications for the 1,000 RS-6A's cannot be made in any other location than the [] felt as 25X1

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well that we would not achieve the improved reliability which we desired inasmuch as the necessary rework would introduce a certain amount of unreliability in itself. The Engineering Division agrees with [] conclusion and accordingly informed the O&T Division of this fact. [] coordinated this matter for them and agreed that the modifications should not be made. Spare parts have been requisitioned for the two types of RS-6A's in the ratio of 1 to 1½.

Considerable discussion followed as to the merit of differentiating between the two types of RS-6A sets by the addition of new nomenclature for the modified version. It was generally felt that this was bad practice since from psychological standpoint all users would naturally tend to specify the later model set. The Board therefore agreed that no distinction should be made. The Engineering Division was charged with the responsibility of giving general notice to the field informing them of the two types of sets and advising them of the logistics' activity required in the stocking and issuance of two types of spare parts.

OC-O&T
and
OC-E
ACTION

Numerous reports have been received from the field stating difficulty encountered in sealing []. A complete technique is being developed and full instructions are expected to be pouched within the next 10 days. It is our intention to supply special heat sealing equipment to the field.

The O&T Division stated that they now have cognizance for burial tests and had investigated the utilization of [] as a means of achieving test conditions. They indicated extreme interest in obtaining samples of all burial materials as they are received in order that they might include them in their test programs. They

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also requested that Engineering Division furnish to them all back files of tests which were conducted by the Engineering Division.

OC-O&T
ACTION

Following the meeting between the [] officials and representatives of the R&D Branch, [] rejected in its entirety the design of the RS-13 transmitter and initiated the development of a completely new unit. This re-design item is approximately 2 X 8 X 10 inches in size with the plug-in coil on the top face. It is expected that in the remaining 7 units the physical size of the transmitter will be reduced to approximately half of this first model. The circuitry is much more stable and satisfactory in operation than either the original [] equipment and the previous transmitter produced by []. The output of this transmitter is 30 watts and appears to be free of harmonics or other spurious responses, and there is no evidence of self-oscillation in any of the stages. Despite the increase in physical size, there is no change in the basic packaging arrangement using [].

[] states that the problems of re-designing this new transmitter were of greater magnitude than originally estimated, which is requiring more time than earlier thought. They are presently working 7 days a week, 15 hours a day, and expect to have a non-working model ready for showing on 3 March, and a working model on 7 March.

Members of the Board felt that the lack of [] present in our version of the [] set should be coordinated with the SR Division to insure that this will not affect proposed operational use of this set. The O&T Division was charged with this responsibility.

Done

OC-O&T
ACTION

3. Proposal by the Engineering Division in Regard to a 500-Watt Transmitter: The proposal from the Engineering Division that 40 HT-4H transmitters be procured at this time was reviewed. After considerable discussion, it was decided that the procurement of HT-4H's should be held to a minimum consistent with Agency immediate needs and that therefore 25 transmitters should be procured rather than the 40 recommended in the proposal by the Engineering Division. The allocation of these 25 transmitters would be made by the Operations & Training Division when they are received.

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The Board further decided that it was very important that a substitute transmitter for the HI-4 be selected at an early date and therefore approved the immediate release of the specifications for a new transmitter.

4. Report on Preparation of Letter to Chief, FI, Regarding Priorities on Automatic Keying Device: It was reported that a letter was in process of preparation to the Chief, FI, thanking him for his interest and informing him that in general a change of priorities was not necessary since the programs in which he was interested were proceeding as though they were all Priority No. 1.

OC-O&T
and
OC-E
ACTION

5. Discussion by Operations and Training Division of Agency Requirements for the AN/PRR-5 Receiver: The O&T Division stated that they would like to procure the five PRR-5's which the [redacted] had offered to us but felt that the cost of these pilot models should be investigated prior to actual procurement. They further stated that they desired to table statements of future requirements for this set until a later date.

OC-E
and
OC-O&T
ACTION

6. GN-43/U Hand Generator: The O&T Division reported that they had received information from the Engineering Division that the GN-43/U Hand Generator would be undergoing earlier production than was previously anticipated. The Board continued in its feeling that the high quantity of GN-58's in stock would prevent us from procuring large quantities of the GN-43/U, but it was now felt that since the Signal Corp was planning for production that we should procure a small quantity for special operational uses.

Done

III.

Under Agenda Item II, New Business:

OC-E
ACTION

1. Discussion by O&T Division Regarding Engineering Development of a Mechanical Filter Switch Kit for the SP-600 Receiver: The O&T Division stated that the purpose of this item on the Agenda was to establish priorities for this mechanical filter switch kit in order that as an objective they might get kits in the field within a period of one year. It was decided that the Engineering Division should investigate to determine whether [redacted] or [redacted] were making such kits or whether they would be willing to undertake such a project at our request. This is to be reported to the Board at the next meeting.

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SECRET

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OC-O&T
ACTION

2. Report by OC-E on the Use of Standard Telephone Dials for the Keying of RS-1, 5, and 6 Transmitters: The Engineering Division reported that tests had been conducted with 3 types of dials and that all keyed the RS-1, 5, and 6 transmitters equally well. The O&T Division was directed to develop procedures and techniques for operation of this type of keying system.

3. Discussion of Items of Development Brought Up at R&D Ideas and Requirements Panel: There was no discussion on this matter.

OC-E
ACTION

4. Discussion on AN/TRC-37 with [redacted]

The Engineering Division pointed out that [redacted] had recently contacted them to request permission to change the AN/TRC-37 from 6 volt to 12 volt operation. He also requested permission to change the frequency range to 4 to 16 mcs and further stated that they were no longer considering the manufacture of the 100-watt amplifier originally proposed. The Engineering Division stated that all of this seemed to indicate that the [redacted] felt that this Agency would be a large user of the AN/TRC-37 and requested the Board's opinion as to anticipated Agency application of the set. It was the feeling of the Board that while we had general interest in the set, we did not have specific interest and [redacted] should be so informed.

OC-E
ACTION

5. Strategic Air Command Requirements for the RS-11: The Engineering Division reported that SAC had indicated that they would be a high volume user of the RS-11 but required that the frequency range be shifted from its present 3 to 12 mcs range to 4 to 16 mcs range. They indicated that this range was not yet firmly established but would be so at the conclusion of a propagation study being made for them by the Bureau of Standards. The Board concurred with the Engineering Division's recommendation that we still desired our sets to retain the presently established frequency range, but that if SAC desired we would investigate the possibility of making a special set for them having the required frequency 4 to 16 mcs range.

IV.

The Board adjourned at 1658 hours. The next regular meeting of the Board will be held on 6 April 1955 at 1400 hours. The Ideas and Requirements Panel will meet on 13 April 1955 at 1400 hours.

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Distribution:

Members and those in attendance
listed in Paragraph I
R&D Internal Projects
R&D External Projects (2)
PEB
MSB

Acting

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